



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,069	02/27/2004	Joachim Feld	2003P00335US	9170

7590 11/17/2009
SIEMENS CORPORATION
INTELLECTUAL PROPERTY DEPT.
170 WOOD AVENUE SOUTH
ISELIN, NJ 08830

EXAMINER

WEIDNER, TIMOTHY J

ART UNIT	PAPER NUMBER
----------	--------------

2476

MAIL DATE	DELIVERY MODE
-----------	---------------

11/17/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/789,069	Applicant(s) FELD ET AL.	
	Examiner Timothy J. Weidner	Art Unit 2476	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

In response to applicant's arguments/amendments filed September 10, 2009:

Arguments, page 4, regarding claims 1-20 rejected under 35 USC 103, state "According to the cited passages in Shaffer, the running of delay times is suspended during transmission of isochronous data. This is not the same as ending a phase of multiple isochronous transmissions by extending a backoff window to the end of one isochronous transmission. This is what the rejection appears to conclude." Examiner respectfully disagrees. This is not what the rejection concludes because the rejection is based on a combination of references, not solely Shaffer. In Shaffer, the transmission of isochronous data appears to be the same as a phase ("phase" interpreted with broadest reasonable interpretation, see MPEP 2111), and further the conclusion of the argument is incorrect because Shaffer is not used to show a phase of multiple isochronous transmissions. In fact, the rejection showed it was been obvious to one of ordinary skill in the art in view of Lee. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The arguments are not persuasive because they have not clearly addressed the combination of references showing obviousness. Therefore, the rejections are maintained.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et al. (US 5960001) in view of Lee et al. (US 6611886 B1).

Regarding claims 1, 6, and 10, Shaffer teaches a method, system, and usable portion of a switchable data network for transmitting data in a switchable data network, comprising users having mechanisms for sending, receiving, and/or forwarding data telegrams (figure 2, item 112; column 5, lines 54-67), during cyclical transmission intervals (column 3, lines 25-26; particular periodic rate) wherein the telegrams having a beginning and an end (column 4, lines 5-10; “beginning ... fixed length”) and wherein the telegrams are assigned priorities (column 2, lines 11-16; “isochronous ... non-isochronous”), wherein a first usable portion is used during a first phase for sending data telegrams assigned a first priority from a first user to a second user (column 4, lines 59-59; “isochronous transmissions are occurring”), with the first phase having a pre-defined receive time for receipt of the end of the respective data telegram assigned the first priority at the second user (columns 4-5, lines 59-10; “isochronous transmission on the bus has just terminated ... backoff window will be automatically extended to the end of the isochronous transmission ... backoff period may be added to the end of the isochronous transmission ... reset upon expiration of the isochronous window”).

However, Shaffer may not explicitly teach sending multiple data telegrams in a phase. Lee, which is in the same field of endeavor, teaches multiple packets sent in a

Art Unit: 2476

single phase (column 9, lines 33-34) for the purpose of for the purpose of utilizing residual bandwidth (column 4, lines 33-37). It would have been obvious to one of ordinary skill in the art at the time the invention was made send multiple data telegrams in a phase to utilize residual bandwidth.

Regarding claims 2 and 7, Shaffer teaches the first users are provided during a second phase after the end of the first phase for exclusively sending data telegrams (column 4, lines 49-67; column 5, lines 1-10) assigned a second priority (column 2, lines 11-16) to the second users.

Regarding claims 3, 8, 11, and 17, Shaffer teaches a first phase and a second phase (column 4, lines 49-67; column 5, lines 1-10), but may not explicitly teach the first users are provided during a third phase after the end of the second phase for sending data telegrams assigned any priority to the second users.

Lee teaches a third priority phase after a first and second phase (column 9, lines 31-33; isochronous, variable isochronous, and asynchronous phases) for the purpose of utilizing residual bandwidth (column 4, lines 33-37). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a third phase after a first and second phase to utilize residual bandwidth.

Regarding claims 4 and 12, Shaffer teaches the first phase is cyclically repeated (column 3, lines 14-26), the first phase having an end time based on a defined receive time of the end of a data telegram by a second user (columns 4-5, lines 59-10; “isochronous transmission on the bus has just terminated ... backoff window will be automatically extended to the end of the isochronous transmission ... backoff period

Art Unit: 2476

may be added to the end of the isochronous transmission ... reset upon expiration of the isochronous window”).

Regarding claims 5, 9, 14-16, and 18, Shaffer teaches the system for transmitting realtime data is provided in the switchable data network, with the realtime data telegrams being assigned the first priority (column 1, lines 50-59; column 2, lines 11-16).

Regarding claim 13, Shaffer teaches the first phase is cyclically repeated (column 3, lines 14-26).

Regarding claim 19, Schaffer teaches the end time of the first phase is based on the length of the data telegram (columns 3 and 4, lines 1-12 and 5-10 respectively).

Claims 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et al. (US 5960001) in view of Lee et al. (US 6611886 B1) as applied to claim 19 above, and further in view of Peterson (US 6301262).

Regarding claim 20, Shaffer and Lee may not explicitly teach the end time is based on a routing time so that the end time differs among users. Peterson, which is in the same field of endeavor, teaches transmission cycles with an end time based on a routing time so that the end time differs among users (column 8, lines 29-42) for the purpose of solving the problem of propagation time due to distance between communications resources (column 2, lines 6-18). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have wherein for at least one cycle the end time of the first phase for each user is also based on routing time to each user receiving a data telegram of the first priority so that the end time of the first

Art Unit: 2476

phase in the at least one cycle differs among users receiving data telegrams based on routing times to account for the problem of propagation time due to distance between communications resources.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Weidner whose telephone number is (571) 270-1825. The examiner can normally be reached on Monday - Friday, 8:00 AM - 5:00 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2476

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Timothy J Weidner/
Examiner, Art Unit 2476

/Ayaz R. Sheikh/
Supervisory Patent Examiner, Art Unit 2476